



# **2009 H1N1 Influenza**

in the  
United States

## **A National Perspective**

## Historical Impact of Flu Pandemics

### 1918-19 Spanish Flu (H1N1)

20-100 million estimated deaths worldwide  
>600,000 U.S. deaths

### 1957-58 Asian Flu (H2N2)

70,000-plus U.S. deaths

### 1968-69 Hong Kong Flu (H3N2)

34,000-plus U.S. deaths

### 2009-10 H1N1 (Swine Flu)

556 reported U.S. deaths as of 28 Aug 09

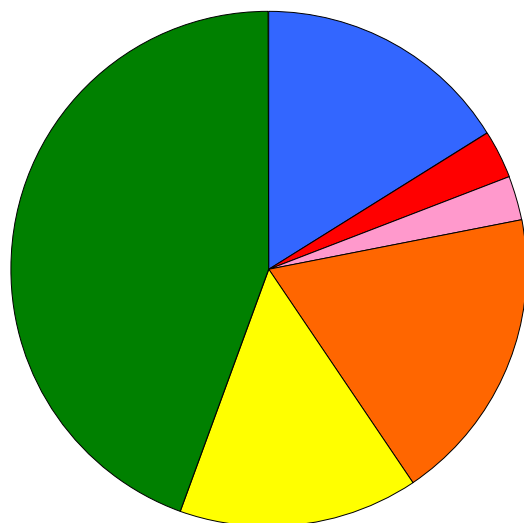
## H1N1 Spring Outbreak Summary

- Occurred very late in the flu season
- Remarkable heterogeneity across U.S.
- Affected young people disproportionately
- Caused widespread illness; some severe or fatal
- Socially disruptive, especially for schools
- Tens of thousands of health workers and others responded worldwide



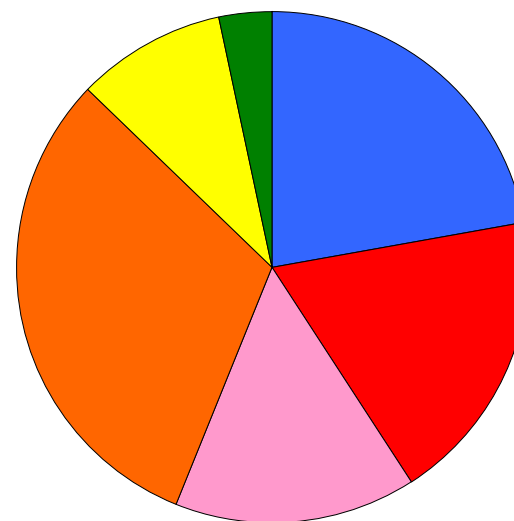
# Teens and Young Adults Disproportionately Affected Few Cases Among Elderly

Seasonal 2007-08



N=3,930

2009 H1N1 (April - Jun)



N=312

\*April 12-June 30

## But, it's Not Over...

### Continuing spread in U.S.

- Outbreaks in >50 summer camps, some colleges, schools and communities across the country

### Southern Hemisphere patterns

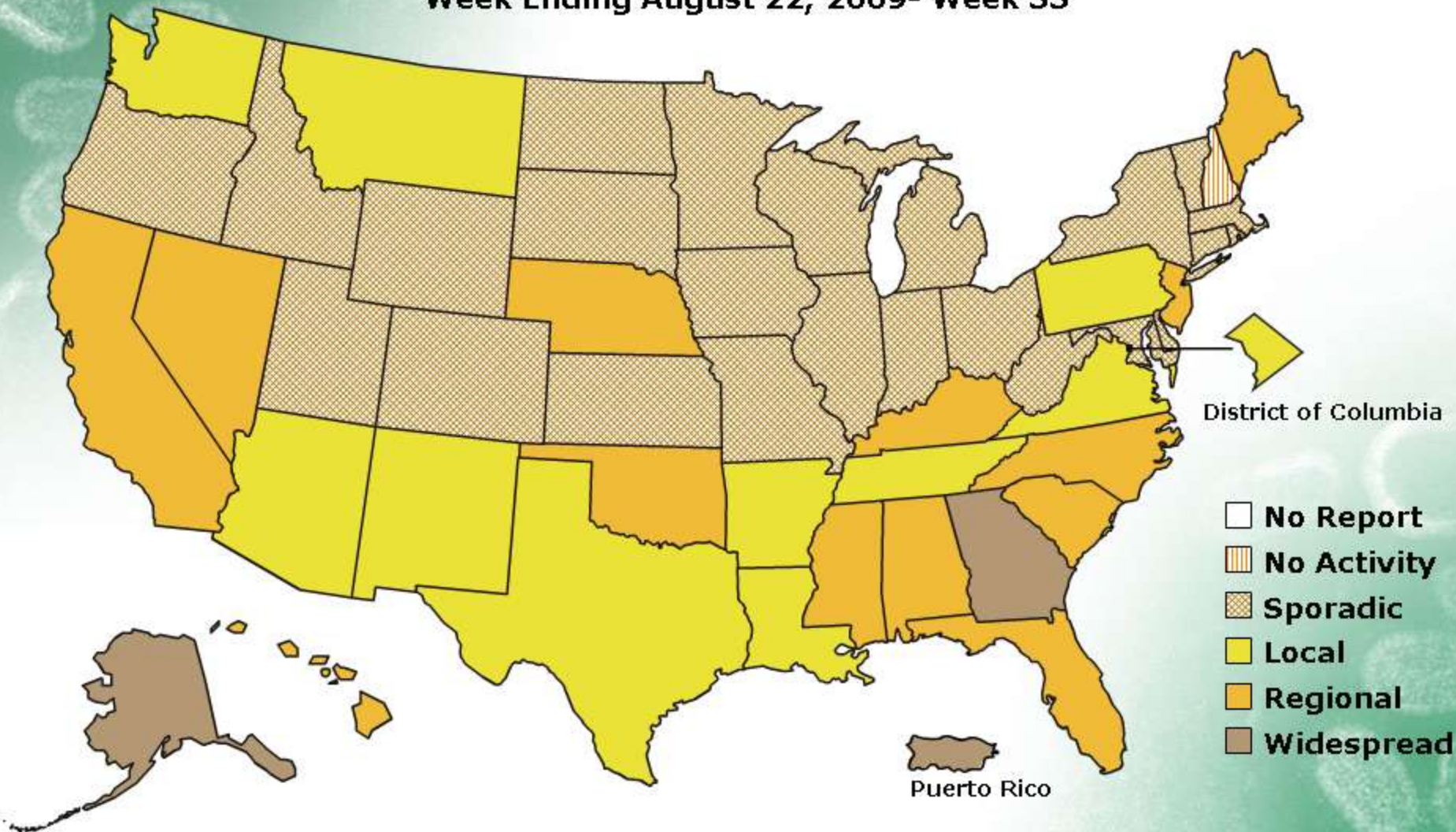
- Substantial disease in Argentina, Chile, Australia
- Reported cases from Africa, Asia
- Co-circulation with seasonal influenza strains in some areas
- Reported strain on health care system in some localities

We anticipate that this pattern will continue and we will see similar patterns in North America in the fall.



**Weekly Influenza Surveillance Report Prepared by the Influenza Division**  
**Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\***

**Week Ending August 22, 2009- Week 33**



# The Federal Government is Mounting an Aggressive Response

## The National Pillars of H1N1:

- Enhanced Surveillance
- Preparing for a Vaccination campaign
- Community Mitigation Measures
- Effective Communication





## National Response to 2009 H1N1 Influenza

- **Surveillance:** Continue to track flu for change in epidemiology, virulence, antigenic pattern, and drug resistance
- **Community Mitigation:** Plan at all levels for appropriate role in prevention/response
  - Health care system, primary care providers and public health (diagnosis, treatment, surge, vaccination)
  - Schools, child care centers, senior centers, other potentially affected institutions
  - Public health (surveillance, testing, response, guidance, vaccination, treatment)
- **Vaccination:** Develop a vaccine and prepare for a vaccination campaign
- **Communication** of accurate and timely information



## Surveillance Is Being Enhanced to Closely Monitor the Behavior of the H1N1 Virus

Surveillance addresses five key needs:

- Finding out when and where influenza activity is occurring
- Tracking influenza-related illness
- Determining what influenza viruses are circulating
- Detecting changes in influenza viruses
- Measuring the impact influenza is having on deaths

HHS/CDC, in collaboration with the U.S. Departments of Education and State and local health departments, is organizing a national school dismissal monitoring system



## Vaccine Development is a Priority

- CDC has isolated the new H1N1 virus and modified the virus so it can be used to make hundreds of millions of doses of vaccine
- Vaccine manufacturers are now using these materials in vaccine production
- Making vaccine is a multiple-step process that takes several months to complete
- Clinical trials are being conducted to assess immune responses and safety of 2009 H1N1 vaccine
- 2009 H1N1 vaccine is expected to be available in mid-October



## Steps in Preparing for a National Voluntary H1N1 Vaccination Program

- **Program planning**
  - Engaging partners in government (state, tribal, local) and private sector
  - Financing of program and vaccine development and administrative costs
- **Implementation of vaccine distribution**
  - Tracking of vaccines and supplies
  - Monitoring vaccination rates and geographic coverage
- **Communications**
  - General public
  - Health professionals
  - People who would benefit most from a vaccine
- **Monitoring vaccine safety**
- **Assessing vaccine effectiveness**

## **Vaccine Planning: Recommendations from the Advisory Committee on Immunization Practices (ACIP)**

- Committee met July 29
- Recommendations on the people who would benefit most from a vaccine based on ACIP recommendations (159 million individuals):
  - **Pregnant women**
  - **Healthcare workers and emergency medical responders**
  - **People caring for infants under 6-months of age**
  - **People ages 6 months to 24 years**
  - **People age 25-64 with underlying medical conditions, i.e. asthma and diabetes**

## **Updating Guidance to Help Local Communities Make Decisions About How To...**

- Keep healthy students in school and sick people at home
- Determine appropriate use of antiviral medications to maximize their benefit and preserve their effectiveness
- Determine when/if more disruptive measures such as cancellation of mass gatherings, school dismissals should be used





## Updated School Guidance

- Designed to:
  - decrease the spread of regular seasonal flu and 2009 H1N1 flu
  - limit the disruption of day-to-day activities
- Provides a set of strategies that schools
  - use to stay open
  - protect students and staff, particularly those at high-risk of complications. should match the severity of the illness that's being reported and local flu activity.
- Step up basic good hygiene practices - hand washing, etc.
- Keep sick students and staff away from school
- Help families identify children at high-risk for flu complications who benefit from early evaluation from their physician if they develop the flu
- Routine cleaning
- Separate ill students and staff from others
- Consider selectively dismissing students and staff

## Updated School Guidance

### Snapshot of recommendations for INCREASED SEVERITY

- Extended exclusion period
  - Under this scenario, people with flu-like illness should stay home for at least 7 days, even if they have no more symptoms. People who are still sick after 7 days should stay home for at least 24 hours after all symptoms are gone.
  - People give off seasonal flu virus for 5 to 7 days and this period may be longer for 2009 H1N1 flu, especially in younger children and those with compromised immune systems.
  - Let high-risk students and staff members stay home
- Active screening
- Keep siblings home: students who have an ill family member should stay home for 5 days from the day that their family member got sick. This is the time period that they're most likely to get sick themselves.
- Increase distance at schools
- School dismissals

## **Updated Institutes of Higher Education Guidance Snapshot of recommendations for current conditions**

- Advise sick students, faculty, and staff to stay home.
- Establish a method for maintaining contact with students who are sick.
- Discourage sick members of the public and sick visitors from attending institution-sponsored events.
- Encourage students and staff at higher risk of complications from flu to check with their health care provider.
- Encourage students, faculty and staff to find out if they should get vaccinated against seasonal and 2009 H1N1 flu.
- Encourage students, faculty and staff to cover their mouths and noses with a tissue when they sneeze or cough.
- Establish regular schedules for frequent cleaning of surfaces and items and provide disposable wipes for commonly used surfaces.
- Encourage students to frequently clean their living quarters.
- Examine current flu or crisis response plans and revise if necessary.
- Communicate with vendors who supply critical products and services for business continuity.



## **Updated Institutes of Higher Education Guidance Snapshot of recommendations for INCREASED SEVERITY**

- Allow students, faculty and staff at higher risk for complications to stay home and find ways for work or study to continue at home.
- Find ways to increase social distances.
- Extend the time sick students, faculty, or staff stay home or in their residences.
- Consider how and when to suspend classes.
- Collaborate with local agencies on a plan for flu response.

## **Updated Guidance for Businesses and Employers**

### **Snapshot of recommendations for current conditions**

- Sick employees should be sent home and should stay home until at least 24 hours after they are free of fever.
- Encourage employees to wash their hands often
- Encourage employees to cover their coughs and sneezes
- Clean surfaces and items that are more likely to have frequent hand contact
- Encourage employees to get vaccinated.
- Protect employees who are at higher risk for complications of flu.
- Prepare for increased numbers of employee absences due to illness in employees and their family members and plan ways for essential business functions to continue.
- Advise employees before traveling to take certain steps.
- Prepare for the possibility of school dismissals or temporary closure of child care programs.





## **Updated Guidance for Businesses and Employers**

### **Snapshot of recommendations for INCREASED SEVERITY**

- Consider active screening of employees who report to work.
- Consider alternative work environments for employees at higher risk for complications of flu during periods of increased flu activity in the community.
- Increase social distancing in the workplace.
- Advise employees about possible disruptions and special considerations while traveling overseas.
- Prepare for school dismissal or closure of child care programs.
- Be aware that the severity of the flu could change rapidly and local recommendations could be revised quickly.
  - Identify sources of timely and accurate information
  - Plan for ways to quickly implement revised or additional measures

## **Additional Guidance to be Released**

- Day Care Guidance to be released 3 or 4 Sept 09
- Day Care Communication Toolkit to be posted on CDC website 3 Sept 09
- DED Secretary Duncan to highlight in a press event 3 Sept 09

# Effective Communication

**Distribution of critical protection information via the Web, CDC info line, stakeholder calls, and other platforms to :**

- Parents
- Pregnant Women
- Child Care Programs
- Schools, Colleges and Universities
- Travelers and Travel Industry
- Clinicians
- Laboratories
- Businesses and Employers
- Hospitals
- Nursing homes and assisted living facilities
- Homeless shelters
- Hard to reach populations



# Flu.gov

Know What to Do About the Flu

## www.flu.gov

### One-Stop-Shop for Flu Information and Resources

The screenshot displays the Flu.gov website with a purple and white color scheme. At the top, the 'Flu.gov' logo is on the left, and 'Know What to Do About the Flu' is on the right. Below the logo is a tagline: 'One-stop access to U.S. Government H1N1, avian and pandemic flu information.' A search bar is located in the top right corner. Navigation links include 'Frequent Questions (FAQs)', 'Español', '繁體中文', and 'Tiếng Việt'. A 'Font Size' dropdown and 'Print' button are also present.

**Flu Home**

- Seasonal Flu
- Plan & Prepare
- General Information
- Where You Live
- Frequent Questions (FAQs)
- Monitoring Outbreaks
- Health & Safety
- Tests, Vaccines, Medications, & Masks
- Animal & Bird Issues
- Global Activities
- Economic Impacts
- Travel
- Research Activities
- News, Multimedia, and Social Media
- Glossary

**H1N1 (Swine Flu) IMMUNIZATION CAMPAIGN**

We are preparing for an H1N1 vaccination campaign. We are making every effort to have a safe and effective H1N1 vaccine available for distribution as soon as mid-October, but it is possible, even probable, that epidemics may begin in different parts of the country before then. This makes prevention even more critical.

On July 29, 2009, the Advisory Committee on Immunization Practices (ACIP)—an advisory committee to CDC—recommended that novel H1N1 flu vaccine be made available first to the following five groups:

- Pregnant women
- Health care workers and emergency medical responders
- People caring for infants under 6 months of age
- Children and young adults from 6 months to 24 years
- People aged 25 to 64 years with underlying medical conditions (e.g. asthma, diabetes)

Combined, these groups would equal approximately 159 million individuals. [More...](#)

**2009 Flu Prevention Video PSA Contest**

*Create a Video About Preventing or Dealing With the Flu & Be Eligible to Win \$2500 Cash!*

- [PSA Contest Rules](#)

**Send to a Friend**

**Get These Widgets**

**KNOW What to Do About the Flu**  
[www.flu.gov](http://www.flu.gov)  
Share this Widget

**Help Prevent Flu**  
Win **\$2500**  
Create a Video  
[www.flu.gov](http://www.flu.gov)  
Share this Widget

**Flu.gov News**

**Questions & Answers: Novel H1N1 Influenza Vaccine (CDC)**  
Wednesday, Jul. 29, 2009 at 4:41 PM

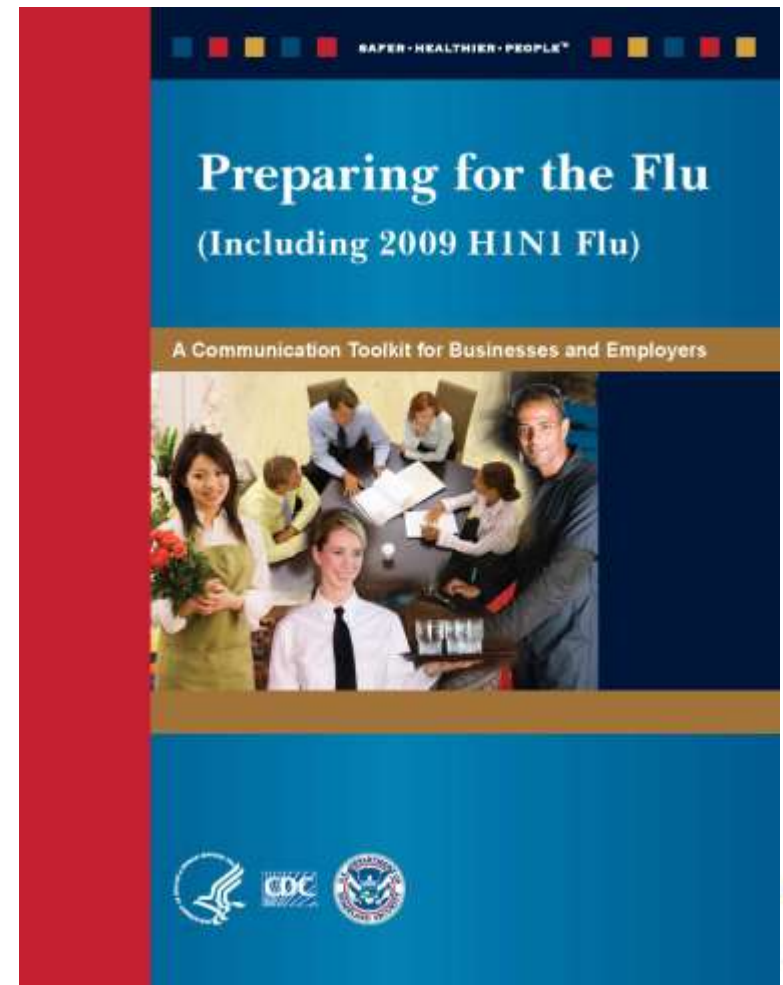
**Novel H1N1 Vaccination Guidance for State, Local, Tribal, and Territorial Health Officials (CDC)**  
Wednesday, Jul. 29, 2009 at 4:38 PM

**FDA Approves Vaccine for 2009-2010 Seasonal Influenza**



# Communications Toolkit for Businesses and Employers

- Questions and Answers
- Quick Reference for Planning / Response
- Fact Sheet for Employers
- Fact Sheet for Employees
- Poster for Workplace Entrances to Remind Sick Employees to Go Home: Template E-mails (or Letters) for Businesses to Send to Employees:
- Text Messages for Businesses to Send to Employees
- Additional Communication Resources for Businesses to Share with Employees
- Additional Web Resources for Businesses to Use for Planning





## **Flu Preparedness is a Shared Responsibility**

- **Keep yourself well informed:**
  - Know What to Do About the Flu: [www.Flu.gov](http://www.Flu.gov)
- **CDC recommends a yearly seasonal flu vaccine as the most important step to prevent seasonal flu**
- **Get vaccinated when H1N1 shots are available**

## Exercise Good Personal Hygiene Habits

Stop the spread of germs that make you and others sick!

**Cover  
your  
Cough**



**Clean  
your  
Hands**  
after coughing or sneezing



- Wash your hands with soap & water
- Try not to touch surfaces that may be contaminated with the flu virus
- Avoid touching your nose, eyes, and mouth
- If you're coughing, cover your mouth with a tissue, dispose after use
- Avoid close contact with sick people
- Stay home if you are sick
- Stay informed [www.flu.gov](http://www.flu.gov)

## What Can You Do to Protect Yourself and Others?

- **Preventing influenza is a shared responsibility**
- **Follow public health advice regarding**
  - Staying home when ill with a flu-like illness
  - Providing early treatment to people with influenza who have a high risk condition or are hospitalized
  - Precautions to take regarding large public gatherings
  - Other social distancing measures that might be recommended depending on the severity of the influenza season
- **These measures will continue to be important even after a 2009 H1N1 vaccine is available**
  - They can prevent the spread of other viruses that cause respiratory infections



**Thank You**

**Commander Patti Pettis**

**Regional Emergency Coordinator**

**HHS Asst. Secretary for Preparedness  
and Response**

**Region IV - Atlanta**

